October 2004 Response Report from the Department of General Administration to the Loss Prevention Review Team

Dolliver Building Incident Report Dated April 2004

We appreciated receiving the OFM Loss Prevention Review Team Report summarizing their thorough independent investigation of the Dolliver Building incident of September 21, 2003, in accordance with RCW 43.41.370 and 380. The report confirmed our assessment of the situation and we had already begun working on several actions suggested by the recommendations.

The purpose of this correspondence is to formally respond to this OFM Loss Prevention Review Team Report as required by RCW 43.41.380(7).

Here is our response to the five (5) detailed recommendations included in the report findings on page 8 of the report referenced above. (Note that recommendations summary on page 3 excludes the fourth recommendation.)

(1) **Responding to Alarms**: We agree with this recommendation.

Thurston County Properties, Which are Under the Division of Capital Facilities (DCF): GA/DCF noted that the alarm was a fire trouble alarm which automatically reset itself. Because these can occur from momentary power system interruptions, DCF determined that this was not an 'urgent situation' and according to policy did not call a first responder to check it. It was instead scheduled for an inspection the following morning. DCF did reevaluate this policy, investigated several approaches, and now has drafted a revised "first responder" policy to respond more efficiently to the numerous alarms that occur on the Capitol Campus (see Appendix A). (The draft policy is currently being reviewed with labor representatives as required prior to final approval. We will advise you if it is not subsequently approved as drafted.) In the future DCF will be working towards implementing a First Responder policy that provides for Powerhouse Stationary Engineers to proceed to the incident site and evaluate the situation in order to accurately determine the appropriate response in terms of personnel or emergency services. It has been determined that approximately \$25,000 worth of safeguards must be installed at the powerhouse before Stationary Engineers can safely leave their duty stations. GA will evaluate possible future funding sources for these safety upgrades.

<u>Properties Outside of Thurston County, Maintained by the Division of State Services'</u> (DSS) Real Estate Services (RES):

DSS has a Building Manager in each facility, who is on-call 24 hours a day to respond to building systems alarms. DSS contracts with vendors which remotely monitor the HVAC, security, and fire alarms. These vendors under the terms of their contracts would contact the Building Manager (or the DSS Business Manager as a backup contact). Since this process is documented in employee performance agreements and vendor contracts, DSS does not have a formal written policy on alarm responses. DSS reviewed their practices in light of the Dolliver Building incident and determined that it provides

adequate control for these five DSS maintained facilities spread across the state;

- 1. North Cascades Gateway Center, Sedro-Woolley, WA
- 2. Alaska Street Building, Seattle, WA
- 3. Tacoma Rhodes, Tacoma, WA
- 4. Yakima Building, Yakima, WA
- 5. Kelso Building, Kelso, WA
- (2) **Commissioning Process**: We agree with this recommendation and a commissioning process by a qualified employee or entity will be completed for all future major/significant HVAC system installations or repairs at all GA owned buildings. DFPM has centralized control over all such major repairs/renovations statewide.

The General Administration 'Design Guidelines & Construction Standards' are updated every two (2) years. The next official update is scheduled for March 2005. At that time the owner commissioning process will be officially incorporated into these guidelines. In the mean time Commissioning will be included in all major building renovations and new construction projects where major/significant HVAC systems and repairs are requested and will be included in the C2 and C100 budget requests as prepared by GA/DFPM.

(3) Improve and Implement After Incident Review Process: We agree with this recommendation. DCF did perform an informal post incident review within two (2) days; however, we believed the OFM-RM LPRT report would satisfy our requirement for a written post incident review. GA did have a formal post incident review policy related to auto accidents. Now general post incident review policies have been established to review to any qualifying incident involving GA within 48 hours. Reference the GA Post Incident Review Policy (Appendix B) and the Division of Capitol Facilities Policies & Procedures – Number 69 (Appendix C). DSS follows the GA policy.

DCF has a separate supplemental policy due to the breadth of their organization. In brief, after any significant operational activity, event, or loss of property occurs involving DCF employees or areas of responsibility, an After Action Review will be conducted within 48 hours to review "lessons learned" and to make the necessary corrective actions. Review will focus on planning, staffing, coordination, execution, and synchronization as pertaining to tasks, action, and key events.

(4) Analysis of all HVAC System Control Centers for Preventative Measures: We agree with this recommendation.

<u>Background Related to Thurston County Properties, Which are Under the Division of Capital Facilities (DCF):</u>

In 1988, GA successfully obtained legislative approval for a capital project to replace the campus HVAC and fire alarm system with a new state-of the-art product called "metasys" (Johnson Control). This transformation was done over several years in five phases at a

total cost of \$6,720,000. By 1994 the capitol campus was operating a fully integrated (HVAC, fire alarms and lighting) automated central control system for the buildings on campus.

Because of internally directed reorganization of GA, in July, 2002 DCF was assigned responsibility for 17 more buildings in Thurston County. These 17 buildings were formerly maintained by another GA Division. At the time of the loss, all of the previous capitol campus buildings (33) were under an automated centralized control system (Metasys) - HVAC, fire alarms, and lighting. The inherited buildings were not automated and centrally controlled; they were independent, stand alone (i.e. incompatible) systems, which were maintained by a combination of private vendor and DCF personnel. Alarms system signals in most cases went to a private alarm company who called a private firm to respond. The Dolliver Building was one of the 17 buildings transferred to DCF and the alarms for this building went to a private company who would then call the Powerhouse. The Powerhouse would assess the alarm response required and arrange for Sunset Air, a private vendor, to do the required maintenance. When the Dolliver Building loss occurred, DCF was still in the process of converting the acquired 17 buildings to their maintenance management system.

The following actions were taken to rectify the Dolliver Building HVAC system deficiencies:

- 1. Reviewed and adjusted HVAC to proper standards.
- 2. Replaced all HVAC hoses and defective equipment.
- 3. Hired Commissioning Agent to re-commission HVAC system.
- 4. Conducted final review with staff, investigator and commissioning agent.

DCF has hired an HVAC Supervisor and one of his major duties is to ensure that 54% of mechanical PM (preventive maintenance) on HVAC systems is accomplished. PM is defined by the HVAC manufacturers and represents the most conservative optimal maintenance, which is greater than is typically performed in the maintenance industry. DCF prioritizes the PM by type, with the critical PM being performed first, so that the unperformed PM is least likely to result in major system problems or failures. The new HVAC Supervisor will also train zone HVAC personnel on how to perform their duties more efficiently. Currently DCF has established the ability to remotely control and change the HVAC system settings on the Dolliver building.

As the OFM report accurately states in the **Analysis of All HVAC System Control Centers** portion of the report, "Modern Control Systems can be programmed to detect excess pressure /heat and shut all or part of the system down to prevent such losses" The current facts and circumstances are that we do not have modern control systems on most buildings on campus - less than 25% have modern control systems. To facilitate the recommendation, a large infusion of dollars (\$5-7 million) would be required to accomplish the preventative programming. We will however, ensure that we are conducting at least 75% of the currently scheduled general PM on the HVAC systems provided that the requested increased PM FTE budget is approved. Due to budget

pressures GA is not proposing a full scale modernization of control systems, opting instead for a phased in approach as the units require replacement.

<u>Properties Outside of Thurston County, Maintained by the Division of State Services'</u> (DSS) Real Estate Services (RES):

During the next year DSS will work with their contractors to evaluate whether additional programming or alarms are possible and cost effective in the various building systems of the five facilities that they maintain.

(5) **Update and Centralize Alarm Systems**: We agree with this recommendation, provided that adequate funding can be obtained for this purpose. In preparation for a cost/benefit analysis (CBA), GA will make an inventory of the various building systems used in the off-campus buildings statewide. We will investigate the cost of such a study and request operating funds for the 07-09 biennium. If approved, the CBA would study the cost-benefit of updating and centralizing control of all building systems of all GA owned properties statewide.

Just to advise you of a related project proposed, a capital budget request package has been developed for the 05-07 biennium titled: Building Controls Upgrade as described below:

CAPITOL CAMPUS—UPGRADE CAMPUS BUILDING CONTROLS
Improve the energy efficiency of heating and air conditioning systems though
improvements in the control systems used to operate them. Features will be added that
will make the operation of the systems more intuitive, reduce training costs, and improve
system effectiveness for tenants. Three tasks will be accomplished under this project:

- 1. Replace the remaining pneumatic controllers in buildings with new electronic controls.
- 2. Upgrade the Johnson Metasys and LonWorks electronic controls system to a graphical web-based interface format.
- 3. Retro-commission controls in buildings for more efficient operation. The air powered (pneumatic) controls in our buildings are old and out-of-date, unreliable, and costly to maintain. Electronic controls allow for coordinated control to replace standalone components. The current building control systems use a variety of computer programs in different formats. Most of the controls are in a difficult to manage and understand text-based system. This makes the training of HVAC technicians difficult and requires more support time by the campus's central control technicians.

The new systems are much more reliable, resulting in lower maintenance costs. Retrocommissioning of the controls is a term for performing a thorough check of the buildings' heating and air-conditioning control systems. Problems found are immediately corrected. In addition, the latest energy saving operating sequences will be implemented to gain energy-efficiency savings. Once operational, the system will reduce a variety of energy related expenses, reduce labor and maintenance costs, assist in staff training, allow for quick identification of problems within the buildings, improve building security, and help meet the tenants' needs by providing a comfortable work environment.

FUNDING REQUEST(S)

05-07 \$15,000 (Fund 045) 05-07 \$875,000 (Fund 289)

Total \$890,000

This \$890,000 proposal is part of the 2005 –2007 Capital Budget Request. It is part of an ongoing effort by GA to upgrade the building HVAC and alarm systems on and around the campus area.

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FIRST RESPONDER POLICY AND PROCEDURES

POLICY:

It is the policy of the Division of Capitol Facilities to participate in an orderly and efficient response to all emergency situations on the State Capitol Campus.

PROCEDURE:

Section 1 - Authority of First Responder

The Division of Capitol Facilities (DCF) shall, at all times, have a designated "First Responder" (FR) available to respond to emergency situations on the Capitol Campus. It will be the primary responsibility of the First Responder to implement this policy and procedure. Staffing for the DCF First Responder will be on-duty Stationary Engineers or selected individuals who have received training specific to their first responder duties.

The public safety (police or fire) Incident Commander will be in charge of all emergency scenes. In most cases, it is the function of public safety providers to manage the emergency situation, with DCF serving in a supporting role as required (see Section 2 of the attached Annex). The First Responder shall be notified of all reports of campus emergencies and shall have full and complete authority for the use and disposition of all DCF resources and shall maintain that authority unless and until relieved by a higher authority. Such higher authority shall then assume all responsibility and authority of the First Responder. The First Responder shall respond, if necessary, to the incident site and coordinate DCF resources as noted in Section 4 below. The First Responder shall coordinate the DCF response through the primary Incident Commander (see Section 2 of the attached Annex) and shall maintain radio contact with the Customer Service Center (during business hours) or the Powerhouse (after business hours and on weekends).

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Section 2 - Notification

<u>During normal business hours:</u> Calls received by DCF on a primary or secondary basis are usually received by the Customer Service Center (CSC), where proper information dissemination will be handled.

The responding shop and management personnel will notify CSC that they are responding. (Refer to Policy and Procedure FSB-30, "Operational Radio Control.")

After hours and weekends/holidays: Upon receipt by DCF (generally the Powerhouse) of the notice of an urgent situation or emergency, the Stationary Engineer will either notify the designated standby First Responder or switch to mobile communication and assume the role of First Responder if he has been appropriately trained and all systems are in place for him to safely leave the powerhouse for a limited period of time (Generally considered to be less than 30 minutes). The First Responder shall immediately dispatch to the incident/emergency location. After assessing the situation, the First Responder shall: 1. Take appropriate action, 2. Notify the Zone Coordinator and affected Agencies, 3. Contact the appropriate tradesman for necessary repairs, 4. Complete and distribute the incident report, 5. Log the incident in the incident report log. 6. Initiate the after action review process. The CSC and the Powerhouse shall maintain a list of contact numbers for Tradesman and Agency staff available to respond.

Section 3 - Operations

Upon arrival, the First Responder will investigate the nature and extent of the emergency and identify the DCF resources, if any, necessary to mitigate the problem. If necessary, the First Responder will immediately establish incident command at the pre-designated location for the particular campus facility. He will contact members of the DCF and/or GA management team as needed, generally in the order as listed on the contact list. As soon as the Zone Coordinator or the appropriate DCF staff arrive onsite, the on-duty Stationary Engineer is to return to the powerhouse and assist DCF staff as necessary from that location. If a standby First Responder staff member had been called out, he is to assist DCF staff onsite until his presence is no longer required.

Throughout the emergency, the On-duty Stationary Engineer shall monitor the radio and provide coordination with other resources and customers as the needs of the DCF mission may dictate.

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During normal business hours, the Agency Coordinator Information Dissemination (ACID) network may be used to provide information about the emergency to affected Agency Facility Coordinators. (Procedure CDC-30, "Agency Coordination Information Dissemination Network", provides guidance and the required listings of paging codes for the various receivers.) The Agency Facility Coordinators should be notified of the nature of the emergency, of a required or impending evacuation, of the anticipated duration of the emergency (if known), and of a decision by the Incident Commander to allow the return of evacuated personnel.

<u>Section 4 - Support Services</u>

In the event the nature of the emergency requires an extended staff complement from DCF, the designated technical staff may be notified. The CSC or the Powerhouse shall be responsible for their notification through radio, telephone or other means. Further, if building evacuation is required, personnel and barricades will be provided. Personnel will deploy the barricades as directed and will assist in the staffing of the various perimeter areas to prevent access by unauthorized persons. Persons to be authorized entry shall be so designated by the Incident Commander or the DCF First Responder/management.

Section 5 - I.D. Card

DCF First Responders shall have proper safety and identification equipment/apparel and have their I.D. cards conspicuously displayed for easy identification.

Section 6 – Incident Evaluation

Within two (2) working days following an incident, the first responder shall complete an after action report. At a minimum, the report shall; summarizing the incident, evaluate the actions taken and notifications made, and suggest potential improvements. A completed copy of the report shall be submitted to DCF's Assistant Director.

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INCIDENT RESPONSE MATRIX

ANN	<u>EX</u>	<u>PRIMARY</u>	<u>SECONDARY</u>	<u>SUPPORT</u>
A	Fire/Fire Alarm, Explosion	<u>OFD</u>	<u>DCF</u>	<u>WSP</u>
В	Smoke Smell - No Alarm	<u>OFD</u>	<u>DCF</u>	WSP
C	Bomb Threat *	$\underline{\text{WSP}}$	<u>OFD</u>	<u>DCF</u>
D	Security Alarm	$\underline{\text{WSP}}$	<u>DCF</u>	
E E-1 E-2 E-3	Weather Threat Severe Storm/Wind Major Snow Flood	DCF DCF DCF	OFD/Public Works	
F	Earthquake	<u>DCF</u>		
G G-1 G-2 G-3 G-4 G-5	Bldg. System Failure Electrical UPS HVAC Plumbing Fire Sprinkler	DCF DCF DCF DCF DCF DCF		
Н	Hazardous Release	<u>OFD</u>	$\underline{\text{WSP}}$	<u>DCF</u>
I	Ash Fallout	<u>DCF</u>		
J	Major Crime	$\underline{\text{WSP}}$	<u>DCF</u>	
K	Emergency Medical	OFD - Medic I	$\underline{\text{WSP}}$	<u>DCF</u>
L	Emp. Accident-Serious	OFD - Medic I	$\underline{\text{WSP}} + \underline{\text{L\&I}}$	<u>DCF</u>
M	Other	<u>DCF</u>		

<u>UNDERLINED</u> - <u>Required Response Agency</u>

NOT UNDERLINED - Called at request of Primary Incident commander

* Once a bomb device is found, WSP, DCF, and tenant agency senior staff shall jointly decide on options to evacuate a facility and WSP will assume primary incident mitigation responsibility. All non-essential personnel will evacuate the area.

GA POST INCIDENT REVIEW POLICY

Purpose Statement: This policy is developed to ensure that subsequent to all major accidents, or incidents that occur involving GA that a post incident review will be conducted

Action: New

Date Approved: October 8, 2004

Approved By: R.D. Fukai

1. A Post Incident Review will be conducted on all major accidents, incidents or series of incidents contributing to a pattern of behavior that has the likelihood of future losses or incidents.

A. A major accident, or incident:

This is any accident, incidents or event that involved or could have caused a death, serious injury, significant loss, or where incidents contributed to a pattern of behavior that has the likelihood of future losses or incidents.

B. Post Incident Review

This is a process that reviews the causes of accidents or incidents and what actions can be taken to ensure the same type of accident or incident doesn't reoccur or there is mitigation of the risk or future loss.

C. Post Incident Review Team

An agency Post Incident Review team will be established whenever GA has an accident/incident that meets the criteria specified above. The team's purpose is to review incidents that involved or could have caused a death, serious injury, significant loss, or where incidents contributed to a pattern of behavior that has the likelihood of future losses or incidents.

- 2. Team Members will include:
 - 1. Assistant Director for Administrative Services, (Agency Risk Manager)
 - 2. GA Safety Program Manager.
 - 3. Shop Steward of the involved program/division.
 - 4. Division Assistant Director for the division that had the accident/incident, and
 - 5. The supervisor or supervisors of the employee or group of employees experiencing the accident or incident.

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GA Post Incident Review Report

Responsible Program Manager:

3.

Description of the incident:

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After Action Review Policy

Purpose:

The purpose of this policy is to provide procedures for staff review of DCF actions in response to incidents that occur in or around DCF maintained facilities, and to provide recommendations designed to prevent the reoccurrence of similar incidents and/or minimize the impact of a similar incident on DCF Staff, Tenants, or property. An important component of this policy is to foster the continual improvement of the DCF organization through the review of past practices.

Policy:

There shall be two categories of after action review procedures. The first category shall be known as a "Formal After Action Review". A "Formal After Action Review" is mandatory after any operational activity or event that results in injury, property damage and/or has been deemed to require a formal review by the Assistant Director or the Deputy Assistant Director. All other non-routine events or activities shall receive an informal review. Both formal and informal reviews shall be initiated as soon as possible after the activity. The Assistant Director or the Deputy Assistant Director shall be notified of any non-routine activity or incident as soon as possible.

Formal After Action Review Procedure:

After the Assistant Director or Deputy Assistant Director has determined that an activity warranting a formal review has occurred, the Zone Coordinator or DCF manager responding to the activity shall complete an initial action report as soon as possible. The Initial Action Report shall alert DCF Staff to any similar potentially dangerous situations or conditions. The initial action report shall be submitted to the Assistant Director or his designated representative within 48 hours and distributed as necessary. An after action review team shall then be appointed by the Assistant Director or his designated representative. The After Action Review Team shall consist of the Zone Coordinator, who will act as the team captain, plus a minimum of two other DCF staff members. If the action involved a trade related issue, a member of that trade, who was not involved in the action, shall be included on the review team. The review team shall interview

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those individuals involved in the action; review the site conditions; confirm the extent of damage or injuries caused; and establish a sequence of events leading up to the action. The final formal action report shall provide a detailed description of the event. It shall focus on planning, staff, coordination, execution, and synchronization as it pertains to tasks and key events. It is mandatory that the Formal Action Report include recommendations for improving DCF response to similar activities and provide suggested corrective actions or "Lessons Learned" for dissemination to other DCF personnel.

Informal After Action Review Procedure:

All non-routine activities or incidents not requiring a formal after action review shall receive an informal after action review. The Zone Coordinator or DCF manager responding to the activity shall be responsible for coordinating the review process. The extent of review performed shall be appropriate to the scope of the incident or activity itself. At a minimum, the activity participants shall assemble as soon as possible after the incident to discuss the particulars of the event and look for ways to improve DCF's performance in the future. Any recommendations arising from this meeting shall be documented and presented to DCF Staff at the next Staff meeting or appropriate training opportunity.